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ANNOTATED LIST NO 32 OF NONPERIODICAL LITERATURE ON PHYSICAL
SCIENCES PUBLISHED IN USSR FOR FOURTH QUARTER OF 1947

(Prepared by Uspekhi Fizicheskikh Nauk)

1. Bakhinskiy, A. I. and Il'yashenko S. M., "Physics, a Textbook for Trade and Railroad Schools" (Fizika, Uchebnik dlya Remeslennykh i Zheleznodorozhnykh Uchilishch) 3d Ed, 396 pp, 566 illus, OGIZ (State Publishing House of Tech Theoretical Lit, Moscow, Leningrad).
2. Belov, N. V., "Structure of Ionic Crystals and Metallic Phases" (Struktura Ionnykh Kristallov i Metallicheskikh Faz), 239 pp, 174 illus, Publications of Acad Sci USSR, Inst of Cryst.
3. Blazhka, S. N., Prof, "Course in General Astronomy" (Kurs Obshchey Astronomii), 500 pp, 251 illus, OGIZ.
4. Veselovskiy, I. I., "Course in Mechanics for Technical Schools" (Kurs Mekhaniki dlya Tekhnikumov), 592 pp, 574 illus, OGIZ.
5. Gol'denberg, A. L., "Temperature Stresses in Thin Films" (Temperaturnyye Napryazheniya v Tonkikh Obolochkakh), 8 pp, no title plate, Ministry of Aviation Industry USSR, Can Aerohydrodynamic Inst imeni Prof N. E. Zhukovskiy, Papers of TsAGI No 618, published by Bu of Kev Tech.
6. Vol'kenshteyn, F. F., "Electrical Conductivity of Semiconductors," 352 pp, 115 illus, OGIZ. Scientific monograph on various electronic processes in crystals. Summary of experimental data; basic, but discusses theory. It is intended for physicists and engineers who are interested in the electrical properties of solid bodies.

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7. Gorelik, G. S., Prof. and Levin, M. L. "Radar" (Radiolokatsiya), 32 pp, 22 illus, Popular Sc. Library, OGIZ. Intended for students who are not too well prepared to undertake the study.
8. Didebulidze, A. I. Active Mem, Acad Sci Georgian SSR, and Didebulidze, G. A., specialist in photographic research, "Photo Reproduction of the Invisible" (Fotoreproduktziya Nevidimogo), 356 pp, 121 illus, Sci Tech Publication of State Ind Inst, Tbilisi, 1946. Scientific monograph in which methods are developed for uncovering the invisible, i.e., that which cannot be seen because of its physico-optical properties and not because of its size. Authors were the first to introduce a method into the system of photo-reproducing the invisible, and have expanded the area of its application.
9. Zauer, P., "Introduction to Gas Dynamics" (Vvedeniye v Gazovyye Dinamiku), trans from the German work by G. A. Vol'pert, 228 pp, 19 illus, OGIZ. Introduction to theory of gas dynamics.
10. Teakovich, M. A., "Theory of Flight" (Teoriya Poleta), 328 pp, 219 illus, OGIZ.
11. Zel'dovich, Ya. B. and Polyarnyy, A. I., "Calculations of Thermal Processes at a High Temperature" (Raschety Teplovykh Protsessov pri Vysokoy Temperaturi), 69 pp, 13 illus, 4 diag (Ministry of Aviation Industry USSR, Res Inst No 1), published by Bu of New Tech. A thermodynamic calculation method for jet engines which can also be applied to combustion engines, certain metallurgical processes, welding, etc.
12. Krasnushkin, P. E., Prof, "Normal Wave Methods for Application to the Problem of Long-Distance Radio Communication" (Metod Normal'nykh Voln v Primenenii k Probleme Dal'nikh Radiovyazey), 52 pp, 10 illus, Order of Lenin Moscow State U imeni M. V. Lomonosov, MGU Publication, Moscow. (A pamphlet which alters Parts III and IV of the Doctor's Thesis, "Normal Wave Methods Applied to Wave Guides and Their Algebraic Types" in which by the same method, the processes were studied for transmission of electromagnetic waves in tubes, multiband lines, multiband filters, and nonuniform media.)
13. Kublanovskiy, L. B., "Elements of the Theory and Calculation of the Instruments for Measuring Pressures and Forces" (Elementy Teorii i Rascheta Priborov dlya Izmereniya Davleniy i Sil), 26 pp, 36 illus, Ministry of Aviation Industry USSR, Res Inst No 1, Papers MII-1 No 37, published by Bu of New Tech. Practical calculation methods for instruments to measure pressures, forces, vibrations, etc., based on resistance and inductance methods.
14. Kutilin, D. I. "Theory of Ultimate Deformations" (Teoriya Konechnykh Deformatsiy), 275 pp, 12 illus, OGIZ.
15. Mal'chenko, E. V., "General Meteorology" (Obshchaya Meteorologiya), 352 pp, 238 illus, 1 map, 6 graphs. Hydrometeorol Publication, Leningrad. A publication of the Ministry of Higher Education USSR which is intended as a textbook for hydro-meteorological technicians.

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16. Moscow University, "Recollections of Isaac Newton" (Pamyati Isaaka N'yutona) (1643-1743), 108 pp with diag and pictures, Order of Lenin Moscow State University M. V. Lomonosov. Collection of papers on Newton and his connection to present scientific thought by Academicians S. I. Vavilov and A. N. Kolmogorov, Corr Mem, Acad Sci USSR; V. K. Arkhd'yev, Prof. A. A. Kosmodem'yanskiy, Prof G. N. Duboshin.

17. Sakharov, D. I. and Kosminkov, I. C., "Collection of Problems in Physics" (Sbornik Zadach po Fizike), 3d Ed, 240 pp, 227 illus, State Educ Pedagog Press of Ministry of Educ RSFSR, Moscow, Leningrad. Intended as a textbook.

18. Sobolev, S. L., "Equations of Mathematical Physics" (Uravneniya Matematicheskoy Fiziki), 440 pp, 14 diag, OGIZ.

19. Studenkov, E. M., "Experimental Study of the Propagation of Electromagnetic Waves in Semiconductors" (Eksperimental'noye Izucheniye Rasprostraneniya Elektromagnitnykh Voln v Polykh Provodnikakh), edited by Prof N. N. Nalov, 96 pp, 53 illus, 1 photo, Sci Reports, Vol XVIII, Physicomathematics Faculty, Moscow State Pedagog Inst imeni V. I. Lenin. Dissertation for a degree in which certain results are presented that were obtained in the experimental study of the effects of the scattering of ultrahigh frequency electromagnetic waves in tubular conductors.

20. "Terminology of Hydromechanics" (Terminologiya Gidromekhaniki), 56 pp, Acad Sci USSR, Tech Terminol Committee, edited by Academicians S. A. Chaplygin, A. M. Terpigorev, and D. S. Lotte. Mechanics Series, 3d Ed, Publications of Acad Sci USSR, Moscow, Leningrad. From Ministry of Higher Educ and intended for technical schools. A collection of recommended terms, synonyms, and English, French, German terms.

21. Omel'yanovskiy, M., Prof, "The Struggle of Materialism Against Idealism in Contemporary Physics" (Bor'ba Materializma Protiv Idealizma v Sovremennoy Fizike), 39 pp, Acad Sci Ukrainian SSR, Inst of Philos, Ukrainian Publication of Polit Lit, in Ukrainian, Kiev. Philosophical evaluation of the struggle of materialistic ideas and theories against idealism.

22. "Seminar Papers on the Theory of Machines and Mechanisms" (Trudy Seminara po Teorii Mashin i Mekhanizmov), Gen Editor, Academician I. I. Artobolevskiy (Acad Sci USSR, Inst of Mach Study), publication of Acad Sci USSR, Moscow, Leningrad.

Vol II, No 5-8, 208 pp with diag, Prof M. A. Kreynec and M. S. Rozovetskiy; N. I. Levitskiy; Academicians I. I. Artobolevskiy and N. I. Levitskiy; Docent M. A. Skuridin; Corr Members, Acad Sci USSR B. N. Delone, V. V. Dobrovol'skiy; Docent M. M. Tishin; Candidates Tech Sci S. A. Cherkudinov and S. I. Sheynberg; Prof Ya. L. Geronimus.

Vol III, No 9, 76 pp, Dir, Tech Sci D. C. Tavkhelidze, Prof N. I. Kolchin, and some of the above.

23. "Electrophorus" (Elektrofer), 4 pp, 1 illus, Ministry of Educ RSFSR, Glavuchtekhprom, Publication No 9 of Visual Education Aids of Glavuchtekhprom RSFSR.

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24. Enshiteyn L. A., "Resistance of Poorly Streamlined Bodies at Subsonic Velocities" (Soprotivleniye Plokhootkaemikh Tel pri Dozuykobykh Skorostyakh), 10 pp, 8 illus, Ministry of the Aviation Industry USSR, Cen Aerohydrodynamic Inst imeni Prof N. E. Zhukovskiy, Papers of TsAGI No 620, published by Bu of New Tech. A basic hypothesis attempts to show that the influence of compressibility on the profile resistance and the effects in a boundary layer in an incompressible fluid can be calculated by the corresponding dependence on Reynold's number.)

[All translations of English language works and popular science materials are omitted.]

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